Geographic Review Panel 4 – San Joaquin River

Proposal number: 2001-C207 **Short Proposal Title:** Stanislaus Spawning Habitat and Floodplain Restoration

1. Applicability to CALFED ERP Goals and Implementation Plan and CVPIA priorities, and relevance to ERP and CVPIA priorities for your region. This Panel feels this pilot demonstration project applies to both CALFED ERP Goals (1,2,3,and 4) and CVPIA-AFRP priorities. The project is intended to increase salmon spawning habitat quantity and quality by increasing gravel storage and mobility and reducing the rate of gravel export; improve juvenile salmon rearing habitat and survival by recreating floodplains and increasing invertebrate production; and restore geomorphic processes to help re-establish riparian vegetation recruitment. Based on previous work done by the proponent, this work should increase the spawning capacity of naturally reproducing salmonid populations in the Stanislaus River. Uncertainties include the longevity of the benefits and the degree to which the physical processes, needed to maintain the recreated spawning and rearing habitat, can be maintained. However, this uncertainty is in part a focus of the project's adaptive management strategy.

The Stanislaus River is arguably the most dysfunctional system of the three- mainstem San Joaquin River tributaries due to the degree of water regulation, floodplain encroachment, and channel incision. This project is intended to be an experimental pilot effort to investigate opportunities for reversing these impacts and re-establishing channel and floodplain function in support of salmon populations. The project is also intended to better identify the process/habitat/species linkages through habitat interventions. This is something that groups on each of the three San Joaquin River tributaries are attempting to do in somewhat different fashion, due to the distinct nature of the problems and constraints on each system, and argues for some better level of coordination and communication among projects.

2. Linkages/coordination with previously funded projects or other restoration activities in your region. As mentioned above, this project builds from the beneficial results of the currently CALFED-funded Knights Ferry Gravel Restoration Project (KFGRP)- A project that added 8,500 cubic yards of spawning material at 18 different sites on the Stanislaus River. However, this Panel is concerned about the lack of a multi-disciplinary, river-wide evaluation of river function constraints and opportunities, in which this sort of project ideally would be nested. However, there is currently a cursory evaluation underway to look at river form and function change from a historical perspective. This cursory evaluation incorporates much of the information previously generated by past work done by Carl Mesick Consultants (CMC) on the KFGRP. And this proposed work by CMC should likely add value to our understanding of existing limitations on the restoration of processes important to maintaining aquatic and riparian-dependent species and populations.

3. Feasibility, especially the project's ability to move forward in a timely and successful manner. TARP failed to reach consensus on this proposal. Specific weaknesses noted include unnecessary study elements (replication of spawning gravels; testing of gravel size preference of steelhead and salmon), methods (alternatives for monitoring sparse sediment transport), and the volume of gravel necessary to do the job. There was also a more global concern that the applicant failed to address fundamental aspects of any gravel restoration program. This Panel believes most of these latter points are addressed in the proposal although different terminology is used. Project does appear feasible as long as sufficient gravel is available.

Technically, CMC has done a good job of working with others that have geomorphic and engineering expertise. However, based on comments in Staff and TARP reviews additional technical input through some formalized review process, possibly the Adaptive Management Forum for Large Scale Channel Restoration Projects being developed by the AFRP, may be warranted to insure that evaluations and designs, especially geomorphic, are sound.

Each of the five reaches in this proposal seem to have unique implementation and design features so that the proposal is a composite of several individual projects contingent on the participation of willing and cooperative landowners. The proponent has done a good job of coordination and outreach with each landowner, but because of the complex suite of social, regulatory, and technical issues associated with each site there is always the possibility that one or more of the project sites identified may run into problems.

4. Qualifications of the applicants and others involved in implementing the proposed project. The proponent has put together a strong multi-disciplinary planning and implementation team. However, the proponent should also be encouraged to solidify a multi-disciplinary peer review team that can meet and discuss project design and implementation and experimental approaches.

5. Local involvement (including environmental compliance). The project proponent has demonstrated a strong effort up front to bring in all interested and required parties for implementation. If funded, because of the detailed nature of this project, the proponent should not underestimate the amount of continued outreach that will be required to keep all parties appraised of planning and implementation progress. It is not clear that this is adequately covered in the budget unless this is covered as the proponents in-kind labor donation to the project.

6. Cost. Costs appear reasonable. The only concern is in the CMC Access and Gravel Purchase Agreement with Ms. Nancy Frymire that indicates that CMC will provide Ms. Frymire with "30 panels of wire stock panels." It is uncertain whether or not this is a cost to be covered by the project or not, and if so whether that is allowable. Also, as part of the COE support and donation of gravel reserves, the COE requests exchange for financially comparable services or improvements to public lands. This needs to be better explained in the context of this proposed project.

7. Cost sharing. Of the requested $2,487,225 an additional 18%, or $446,526 dollars or in-kind services come from a varied suite of partners.

8. Additional comments. To re-iterate a previous comment, this Panel believes it is important to establish an outside review team that can provide input to the project as it is further designed and implemented in order to maximize technical expertise input on this complex project. The Panel is also concerned about the size of the project, which borders on full-scale implementation. It is unclear how inter-dependent the individual project components are and whether or not the information and ecological benefit would be reduced by phasing some components of this project. One option would be to consider funding the remainder of the need to complete the Two-Mile Bar portion of the project, which currently has the largest cost-share contribution. We concur with the TARP recommendation to remove replication for gravel-size evaluations. Additional work at other sites should not proceed until the restoration of Two-Mile Bar is evaluated.

Regional Ranking

Panel Ranking: Medium high

Provide a brief explanation of your ranking: The TARP was split between fair and very good, which could be considered a good with no apparent fatal technical flaws. Regionally, this is an important, yet complex project on a San Joaquin River tributary that has received the least amount of regional restoration attention. Based on the ecological and informational value, this Panel believes this project justifies a medium high ranking with a recommendation that additional outside expertise be solidified to help inform the implementation process and that the scope be reduced and construction phased (see Additional comments).